

**ANSWERS****Using Estimation: Knowing What's Too Big and Too Small**

Adding and subtracting large numbers can sometimes be difficult. Estimating is an easy way to figure out if your answer is close, or if you need to try again.

EX:

$$227 + 631 = \underline{\hspace{2cm}}$$

This looks hard. But there are some things you can know right away just by looking at it.

For example, what if you had an answer like 78?

You should know immediately that it must be wrong.

A 3-digit number + a 3-digit number can never equal a 2-digit number. It's too small!

OR, what if you had an answer like 12,428?

You should also know this is wrong.

A 3-digit number + a 3-digit number can never equal a 5-digit number. It's way too big!

If  $227 + 631$  is a difficult problem for you, you can still estimate an answer.

You should be able to determine that the answer probably has 3 digits or, at most, 4 digits.

(The actual answer is 858, a large three-digit number.)

Note: The same thing is true for subtraction.

Answer the following multiple choice problems. None of the possible answers are correct, but one is closer to the correct answer than any of the others. Pick the answer provided that is closest to the correct answer.

**1.  $428 + 298 =$**

- a. 650
- b. 65
- c. 6,500

**4.  $856 - 32 =$**

- a. 800
- b. 8,000
- c. 80

**2.  $82 + 45 =$**

- a. 11
- b. 1,100
- c. 110

**5.  $7,324 - 119 =$**

- a. 72
- b. 720
- c. 7,200

**3.  $634 + 56 =$**

- a. 6,700
- b. 67
- c. 670